



Ribbon Acumen™ – AIOps & Automation Platform

Your Path to Fully Autonomous Networks



Acumen is an AIOps and automation platform built to reduce deployment timelines and deliver customizable automation across the network lifecycle. It ingests data from layers 0 to 7, providing end-to-end network observability across multi-vendor, multi-domain environments. Acumen can monetize that data and offer AI-driven insights.

Service Providers and enterprises are ramping up their efforts to operationalize and monetize AI capabilities. In a recent survey of 133 telco executives conducted by McKinsey, 50 percent are currently capturing the impact of AI/GenAI, which is twice the number reported in their 2024 data.

As AI-enabled digitalization accelerates, challenges will remain in terms of cost reduction, workforce restructuring, technology maintenance, and data monetization. Cloud native architectures offer some relief given their inherent automation, dynamic scalability, and resiliency. They also make it easier to consolidate multiple networks into a single platform. However, it will be many years before cloud native software dominates deployments. For the foreseeable future, we can expect a diverse combination of hardware, virtualized software, and legacy network elements.

To win the race to AI native digitalization, organizations need:

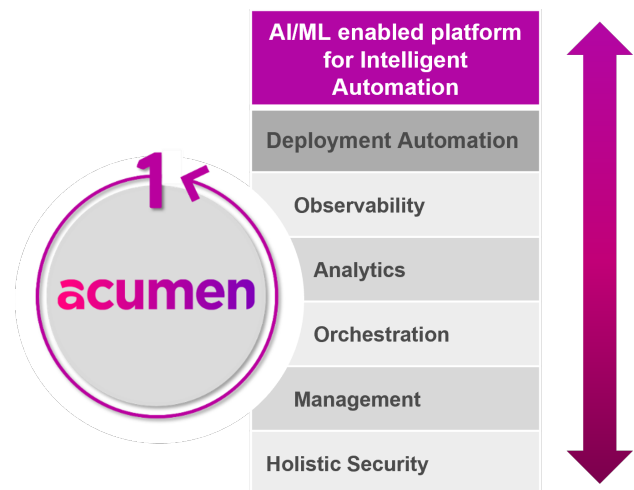
- Cross-functional organizational alignment
- Analysis & automation tools that are developed with AI at the core
- Processes that can communicate with each other and make decisions at scale and autonomously
- A keen understanding of their data

Introducing Ribbon Acumen

Ribbon Acumen is an AIOps and automation platform designed to deliver business outcomes across day 0 to day n of the network lifecycle, from deployment, operations, to continuous innovation, delivering end-to-end network insights. It automates

the network lifecycle, transforming data into a strategic asset. Acumen reduces data noise to support efficient decision-making, and increase return on investment, all while maximizing innovation. It's thoughtfully engineered to unify workflows, streamline, and optimize operations from layer 0 to 7 of the OSI model—for both voice and data. The cloud native architecture provides service providers and enterprises redundancy, high availability, CI/CD tools, and DevOps practices.

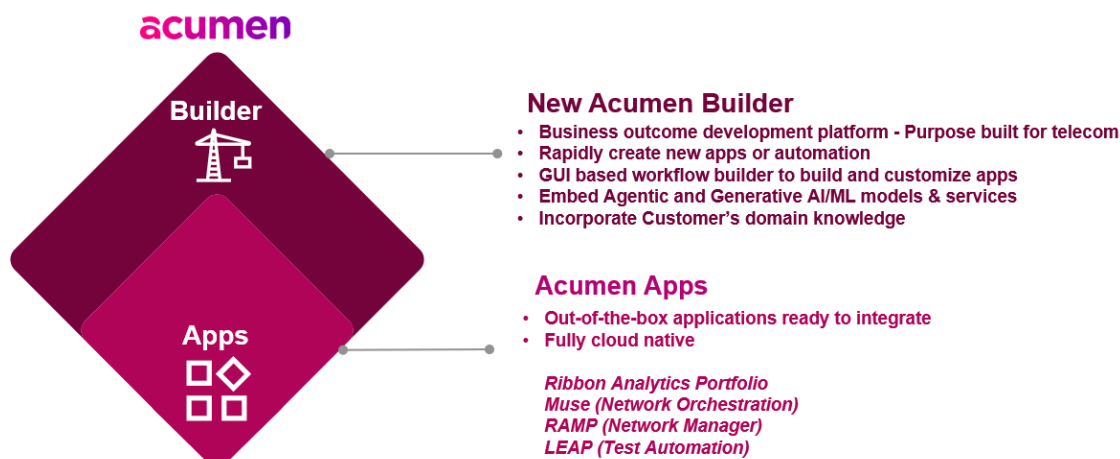
Acumen is integrated with multiple generations of Ribbon platforms and solutions and highly customizable for 3rd party elements. Acumen enables this with single-pane-of-glass management and administration. Whether your network is composed of hardware, virtualized software, or cloud native elements, you can extract value from Acumen.



Full stack L0-L7 end-to-end visibility & network lifecycle automation across Voice and Data planes

The Platform

Acumen includes pre-built out-of-the-box applications and a low-code/no-code app development workflow builder. The platform leverages pre-built applications from Ribbon's Analytics and Muse. Acumen Builder incorporates AI agents into business processes to help create or customize applications with little or no coding. Elements of data or workflows from one solution can be combined and intelligently correlated with another to drive a new workflow. Acumen's advanced AI/ML engine can be part of that customization; invoke it to analyze, correlate, and act upon data to optimize network performance and automatically mitigate issues or threats.



Acumen AI Builder

Acumen AI Builder enables customers to design, chain, and customize automation workflows, including integration of chatbot interfaces, while supporting both human-in-the-loop and fully automated operations.

- The Acumen Builder allows users to connect siloed applications into end-to-end workflows tailored to specific operational or business outcomes, such as troubleshooting or resource optimization.
- Customers can select which AI models to use within workflows, including options for public, private, or geographically restricted models, addressing data privacy and regulatory requirements.
- Acumen can seamlessly integrate into 3rd party automation tools. This integration allows organizations to co-ordinate and automate workflows across different platforms with ease.

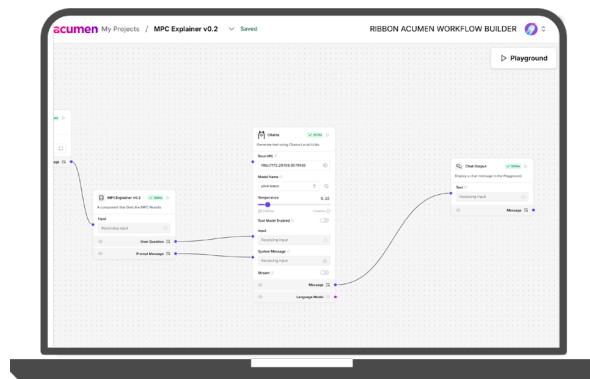


Image: Acumen Builder - Graphical Workflows

The approach eliminates the need for costly and time-consuming systems integration projects to incorporate Ribbon elements into an organization-wide automation solution. Ribbon recognizes that many service providers may have an organization-wide automation strategy. That's why Acumen's design is open at every stage, allowing you to leverage existing data, service, and automation investments.

Acumen Automation Domains

1. **AIOps Automation:** Connect operational insights to broader business outcomes such as customer churn, identify root causes, and optimize resources, using AI/ML to enable both reactive and proactive network operations.
2. **Deployment & Lifecycle Management:** Reduce upgrade cycles from months to weeks, accelerate deployment through declarative provisioning, GitOps-based configurations, digital twinning, and automated regression testing.
3. **SecOps Automation:** Secure multi-domain operations, address compliance rapidly, mitigate vulnerabilities, and recognize internal and external threats with tools to enable real-time security compliance.



**AIOps
Automation**



**Deployment & Lifecycle
Automation**



**SecOps
Automation**

Network Automation Platform for all Your Automation Requirements

- **New Release/Upgrade Cycles** - Acumen's advanced automation capabilities enable automation of routine provisioning, application lifecycle management, and acceleration of network and security operations. It eliminates manual processes that are time-consuming, and error-prone.
 - Automate responses, workflows, and actions to effortlessly resolve issues and efficiently remediate threats, in real-time.
 - AI and ML technology helps streamline and optimize network planning, support, and traffic engineering functions.
 - Acumen leverages chatbots and machine learning to assist in network upgrade process. This includes learning and creating new test cases from real-world scenarios in pre-production environments.
- **Reduce Data Noise** - Acumen ingests, correlates, and analyzes disparate data from diverse sources, including logs, CDRs, alarms, incidents, and metrics, at scale. It enables experts to intelligently detect anomalies, isolate issues, identify probable causes, forecast capacity requirements, and optimize network designs. Acumen can correlate massive data sets, beyond what even a team of experts can analyze, enabling an extensive collection of analytic capabilities, including:
 - Predictive analytics to proactively detect issues before they impact your customers and business.
 - Descriptive analytics to easily identify key business patterns and customer trends.
 - Prescriptive analytics to make well-informed, data-driven business and network engineering decisions.

- **Operations Across Multi-vendor** - Acumen delivers end-to-end network visibility by ingesting data from Ribbon and 3rd party products, spanning customer premises equipment to core network.
 - Eliminate siloed network views and information flows across multi-vendor networks.
 - Acumen can ingest data via direct streaming, software probes (both Ribbon and third-party), and modern data buses such as Kafka, supporting both data at rest and data in motion for real-time analytics.
 - It helps improve customer satisfaction by proactively identifying vendor updates and tracking behavior to detect device-related problems.
- **Security Compliance** - Acumen enables advanced security, providing real-time, automated protection across networks, devices, and applications.
 - The integral AI/ML engine helps overcome security gaps and blind spots by holistically analyzing and correlating threat intelligence data from across your network.
 - It understands inventory, software levels and 3rd party component modules to help improve vulnerability management.
 - It can respond to threats in one domain by acting in another, potentially reconfiguring or restricting network access or disabling a compromised component to protect other elements.

“ We’ve have built a complete ecosystem using Ribbon’s data and this data is consumed by my central quality teams, as well as the larger ecosystem team & partner teams. Ultimate objective, how to improve experience at the network level, at the customer level, that is how the system is being utilized.”

-Ajay Jain, EVP of Digitization, Bharti Airtel



Why Ribbon Acumen

Supporting Your Network Journey From Partially Autonomous to Fully Autonomous

No matter where you are in your network transformation journey, even if you are still on hardware, Acumen can catapult you on the path to an autonomous network.

- Ribbon Acumen is focussed on delivering business outcomes. It enables building applications in a fail-fast manner by bringing a consulting DevOps approach, rapidly prototyping new solutions without the need to engage engineering resources.
- Acumen is easily integrated in private data center, public cloud, or hybrid environments, and maintains the security and data compliance required. Optimize resources and reduce costs with a cloud native, microservices architecture. .
- Prefer physical appliances, no problem. Acumen’s test automation and AI/ML toolsets allow for rapid test and iteration. It enables operations teams to reduce time to upgrade and to launch services from months or years to weeks.
- Empower non-experts with AI agents to take actions for faster problem resolution. This eliminates the need to access multiple platforms, and troubleshoot without the advanced domain knowledge.

Contact Us

Contact us to learn more about Ribbon solutions.